AMENDMENTS TO THE CLAIMS

Claims 1-7 (Canceled)

Claim 8 (Currently Amended): A production method of a TiAl based alloy comprising: ~~a step for~~

holding a TiAl based alloy material ~~having a fine lamellar microstructure and~~ containing Al ~~at least~~ in an amount of from 43 to 48 atomic % ~~, and Cr in an amount of more than 5 atomic % and less than or equal to 10 atomic %,~~ in an equilibrium temperature range of an α phase (1503K to 1673K) ~~; a step for taking the TiAl based alloy material out of a furnace~~; and ~~a step for~~

subjecting the TiAl based alloy material which had been held at that temperature to high-speed plastic working, while cooling the material to a predetermined working terminal temperature at a cooling speed of 50 to 700°C/min, to produce a microstructure comprising 60 area% or more of lamellar grains in which an α_2 phase and a γ phase are alternately laminated.

Claim 9 (Canceled)

Claim 10 (Previously Presented): A production method of a TiAl based alloy according to claim 8, wherein said working terminal temperature is 1473K.

Claim 11 (Original): A production method of a TiAl based alloy according to claim 8, wherein said TiAl based alloy material is held at said holding temperature with the material being covered with a thermal insulation material, and then said TiAl based alloy is subjected to high-speed plastic working, together with said thermal insulation material.

Claim 12 (Original): A production method of a TiAl based alloy according to claim 8, wherein a forging method is used as said high-speed plastic working.

Claim 13 (Canceled)

Claim 14 (Currently Amended): A production method of a TiAl based alloy comprising: ~~a step for~~

holding a TiAl based alloy material ~~having a fine lamellar microstructure and~~ containing Al ~~at least~~ in an amount of from 38 to 44 atomic % ~~, and Cr in an amount of more than 5 atomic % and less than or equal to 10 atomic %,~~ in an equilibrium temperature range of a ($\alpha + \beta$) phase (1423K to 1573K) ~~; a step for taking the TiAl based alloy material out of a furnace~~; and ~~a step for~~

subjecting the TiAl based alloy material which had been held at that temperature to high-speed plastic working, while cooling the material to a predetermined working terminal temperature at a cooling speed of 50 to 700°C/min, to produce a microstructure comprising 60 area% or more of lamellar grains in which an α_2 phase and a γ phase are alternately laminated.

Claim 15 (Canceled)

Claim 16 (Previously Presented): A production method of a TiAl based alloy according to claim 14, wherein said working terminal temperature is 1273K.

Claim 17 (Original): A production method of a TiAl based alloy according to claim 14, wherein a forging method is used as said high-speed plastic working.

Claims 18-19 (Canceled)

Claim 20 (New): A production method of a TiAl based alloy according to claim 8, wherein the lamellar grains are in a matrix comprising the γ phase.

Claim 21 (New): A production method of a TiAl based alloy according to claim 14, wherein the lamellar grains are in a matrix comprising the γ phase.

Claim 22 (New): A production method of a TiAl based alloy according to claim 21, wherein the matrix further comprises a β phase.

Claim 23 (New): A production method of a TiAl based alloy according to claim 8, wherein the lamellar grains have a mean grain diameter of from 1 to 50 μm.

Claim 24 (New): A production method of a TiAl based alloy according to claim 14, wherein the lamellar grains have a mean grain diameter of from 1 to 50 μm.